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10/754,322

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EXAMINER

KOZIOL, STEPHEN R

ART UNIT

PAPER NUMBER

2624

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/754,322

Applicant(s)

HATTI ET AL.

Examiner

STEPHEN R. KOZIOL

Art Unit

2624

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 7-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, and 7-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

Detailed Action

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on 03/11/2008 has been entered. Claims 1 and 7 have been amended while claims 2 and 6 have been canceled. Claims 1, 3-5, and 7-14 are pending.

***Response to Arguments***

2. *Summary of Applicant's Remarks:*

Applicants traverse the rejection of claims 1, 4 and 9 under 35 U.S.C. § 102(b).

Specifically, applicants disagree with the notion that Baker teaches the newly added limitations of claim 1 and the "controller" limitation as required by independent claims 4 and 9 ("Remarks" 03/11/2008, pp. 7-8).

*Response to Arguments re 35 U.S.C. § 102(b) rejection:*

Claim 1 has been amended to add the limitation of "repeatedly providing a last of the first number of lines for scaling or composing or capturing for each of the horizontal synchronization pulses that are associated with line numbers that exceed the first number of lines" which Applicants claim is not found in Baker. However, col. 9 lines 21-42 of Baker are interpreted to teach this limitation. Here, Baker teaches repeating each of the last (previous) horizontal lines of YUV display image data four times before providing

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the next line for display four more times (see also Fig. 6). Baker col. 18 line 32 thru col. 19 line 6 also teaches the repeatedly providing lines for display, as claimed.

One way for Applicants to overcome Baker with respect to claims 1, 4 and 9 would be to clarify how the first and second number of lines, as represented by the first and second parameter are determined and subsequently used in saving processor cycles by helping to avoid redundant calculations when repeatedly displaying an image line, as described in ¶¶0026-28 of Applicant's specification. As the independent claims currently stand, the "first and second parameters" indicating the image contains a "first and second number of lines" is so broad as to allow the cited teaching of Baker to anticipate the use of these "first and second parameters" as indicated in claims 1, 4 and 9. Amending independent claims 1, 4 and 9 to more clearly reflect the specification's description of the use of the "first and second parameters" in repeating a horizontal image line (¶¶0026-28) is a way to distinguish Applicants' claims over Baker, and render the 102 rejections presented herein moot.

### ***Claim Objections***

3. Claim 3 is objected to for depending on cancelled claim 2, and is being treated as depending on claim 1 instead. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-5, and 7-14 are rejected under 35 U.S.C. § 102(b) as being anticipated by Baker et al., US 5,777,601 (“Baker”).

Regarding claim 1, Baker discloses a method for displaying a picture (Abstract, fig 1A), said method comprising:

- i. providing a first parameter (fig. 3, also, col. 13, ln. 64-67 cont’ col. 14, ln. 1-18 “modulated chrominance components”) to a first register (fig. 3 item 136, also, col. 13, ln. 64-67 cont’ col. 14, ln. 1-18 “video output memory”) indicating that the picture comprises a first number of lines (col. 13, ln. 64-67 cont’ col. 14, ln. 1-18, where Baker’s “modulated chrominance components” contribute to the run-length encoded (RLE) image stream, indicating a first number of image lines);  
and
- ii. providing a second parameter (fig. 3, also, col. 13, ln. 64-67 cont’ col. 14, ln. 1-18 “luminance components”) to a second register (fig. 3 item 128, also, col. 13, ln. 64-67 cont’ col. 14, ln. 1-18 “display memory”), indicating that the picture comprises a second number of lines (col. 13, ln. 64-67 cont’ col. 14, ln. 1-18, where Baker’s “luminance components” contribute to the run-length encoded (RLE) image stream, indicating a second number of image lines).
- iii. receiving a horizontal synchronization pulse (fig 7, items 706-716, also, col. 19 ln. 65-67 cont’ col. 20, ln. 1-5, as well as col. 14 lines 4-18);
- iv. providing the particular one of the first number of lines for scaling (fig. 3, item 306, also, col. 12, ln. 14-38) or composing (fig 3, item 316, further, col. 12, ln. 64-67 cont’ col. 13, ln. 1-21 “the media stream controller, fig. 1 item 114, then generates digital composite pixel data”) or capturing (fig 3, item 320, further, col.

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- 12, ln. 64-67 cont' col. 13, ln. 1-21) for the horizontal synchronization pulses that are associated with line numbers that exceed the first number of lines (see also col. 18 lines 32-52); and
- v. "repeatedly providing a last of the first number of lines for scaling or composing or capturing for each of the horizontal synchronization pulses that are associated with line numbers that exceed the first number of lines" (see col. 9 lines 21-42 as described above).

Claim 2 has been cancelled.

Regarding claim 3 Baker discloses method for displaying a picture further comprising:

- i. if the horizontal synchronization pulse is associated with a particular one of the first number of lines (col. 26, ln. 30-47 where the RLE data containing an image parameter indicating a first number of lines as established re claim 1 above, is fetched from the FIFO to the RLE decoder for display), fetching the particular one of the first number of lines for scaling or composing or capturing (see claim 1 for scaling, composing, and capturing discussion); and
- ii. if the horizontal synchronization pulse is not associated with a particular one of the first number of lines (col. 26, ln. 30-47 where the last line of RLE data containing an image parameter indicating a first number of lines as established re claim 1 above, is repeatedly fetched by the data register fig. 9 item 934), fetching a last of the first number of lines for scaling or composing or capturing (see claim 1 for scaling, composing, and capturing discussion).

Regarding claim 4 Baker discloses a decoder system for displaying a picture (Abstract, fig. 1A), said decoder comprising:

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- i. a feeder for fetching lines of the picture (fig. 3 item 314, also, col. 12, ln. 48-56);
- ii. a scalar for scaling lines of the picture (fig. 3, item 306, also, col. 12, ln. 14-38);
- iii. a compositor composing multiple video/graphics layers (fig 3, item 316, further, col. 12, ln. 64-67 cont' col. 13, ln. 1-21 "the media stream controller, fig. 1 item 114, then generates digital composite pixel data");
- iv. a video capture capturing the picture into DRAM capturing (fig 3, item 320, further, col.8, ln. 15-27) and
- v. a controller for providing a first parameter to the feeder indicating that the picture comprises a first number of lines (fig. 1A item 114 is the "media stream controller" that is interpreted to act as the controller for providing an image for display. Additional control logic is described in col. 25 lines 54-67) and providing a second parameter to the scalar or compositor or capture indicating that the picture comprises a second number of lines (fig. 3 item 128, also col. 13, ln. 64-67 cont' col. 14, ln. 1-18).

Regarding claim 5 Baker discloses a decoder system for displaying a picture wherein the feeder comprises a register (fig. 3 item 314-316, also, col. 12, ln. 48-56) for storing the first parameter and wherein the scalar or compositor or capture comprises a register for storing the second parameter (see claim 2 ii for scaling, composing, and capturing discussion, including registers for storing the second parameter).

Claim 6 has been cancelled.

Regarding newly amended claim 7, Baker teaches the decoder system of claim 4 wherein the scalar or compositor or capture receives horizontal synchronization pulses and wherein the feeder provides the particular one of the first number of lines for scaling

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or composing or capturing for the horizontal synchronization pulses that are associated with particular ones of the first number of lines and repeatedly provides a last of the first number of lines for scaling or composing or capturing for each of the horizontal synchronization pulses that are associated with line numbers that exceed the first number of lines. (see col. 9 lines 21-42 as described re claim 1 above).

Claim 8 has been analyzed and is rejected with respect to claim 3 above because the limitations in claim 8 overlap those of claim 3.

Regarding claim 9 Baker discloses a circuit for displaying a picture, said circuit comprising:

- i. a feeder (fig. 3 item 314, also, col. 12, ln. 48-56);
- ii. a scalar connected to the feeder (fig. 3, item 306, also, col. 12, ln. 14-38);
- iii. a compositor connected to the feeder (fig 3, item 316, further, col. 12, ln. 64-67 cont' col. 13, ln. 1-21 "the media stream controller, fig. 1 item 114, then generates digital composite pixel data");
- iv. a video capture connected to the feeder (fig 3, item 320, further, col.8, ln. 15-27);  
and
- v. a controller (fig 1A item 114, where the network of buses indicated in Fig. 1A effectively connect the "media stream controller" to the various components of the display circuit) connected to the feeder, the scalar, the compositor, the capture and the controller operable to program a feeder with a first parameter indicating that the picture comprises a first number of lines and program a scalar or compositor or capture with a second parameter indicating that the picture comprises a second number of lines (col. 13, ln. 64-67 cont' col. 14, ln. 1-18).



Regarding claim 10 Baker discloses a circuit for displaying a picture further comprising: memory connected to the controller (fig 3, item 320, further, col.8, ln. 15-27), said memory storing a plurality of instructions, wherein execution of the plurality of instructions by the controller causes: programming the feeder with the first parameter indicating that the picture comprises a first number of lines; and programming the scalar or compositor or capture with the second parameter indicating that the picture comprises a second number of lines (fig, 3, also, col. 13, ln. 64-67 cont' col. 14, ln. 1-18, further, col. 26, ln. 30-47).

Claim 11 has been analyzed and is rejected for the reasons indicated re claim 5 above.

Claim 12 has been analyzed and is rejected for the reasons indicated re claim 1 item iii above.

Claim 13 has been analyzed and is rejected for the reasons indicated re claim 1 above.

Claim 14 has been analyzed and is rejected for the reasons indicated re claim 1 above.

*Contact*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Koziol whose telephone number is (571) 270-1844. The examiner can normally be reached on Monday - Friday 9:00 - 5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached at (571) 272-7413 . Customer Service can be reached at (571) 272-2600. The fax number for the organization where this application or proceeding is assigned is (571) 273-7332.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

05/21/2008

/s r k/

/Samir A. Ahmed/

Supervisory Patent Examiner, Art Unit 2624